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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert V. Wilder Attorney at Law 4235 Kingsburg Drive Round Rock, TX 78681			EXAMINER OLSEN, LIN B	
			ART UNIT 3661	PAPER NUMBER
			MAIL DATE 03/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,807

Applicant(s)

DOLPH, BLAINE H.

Examiner

LIN B. OLSEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 15 April 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) 26-32, 34 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-25 and 33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 4/15/2004
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions was required under 35 U.S.C. 121:

- I. Claims 1-25 and 33, drawn to an application development system, classified in class 717, subclass 100.
- II. Claims 26-32, and 34 drawn to ****a GPS related device***, classified in class 701, subclass 213.

By telephonic interview with attorney Robert V. Wilder, applicant selected Group 1, claims 1-26 and claim 33 without traverse on January 30, 2008.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show element 201 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the steps of "acquiring a GPS reading", "determining a desired geometric shape" and "applying said geometric shape to said GPS reading". But the claim does not specify storing the GPS reading either in a database or in a graphical entity, so the means to "apply" a shape to the reading is unclear.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim should clearly define a computer-readable medium encoded with a computer program. This will recite a computer element which defines the structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized.

"A claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035."

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims **1, 3, 5-6, 11-13, 22 & 33** are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Publication No. 2004/0054460 to Walters et al. (Walters). Walters is concerned with providing an application programming interface to navigation operations. Walters describes four ways for interfacing navigation operations to an

application; the first method, described in paragraphs 30 through 41, will be used for illustration purposes herein.

Claim 1 claims - "A method for developing GPS-related user applications, said method comprising:

acquiring a GPS reading for a location at which a GPS receiver is located;" - In the reference, Walters, at Fig. 5 GPS readings [512] are shown being acquired in an applications development environment.

"determining a desired geometric shape to be related to said GPS reading; and" - Walters' mapping modules [505] are defined in paragraph 35 as including 'the navigation operations to draw a map, overlay user-defined or custom application defined data on the map' among other functions. A desired geometric shape is equated with user-defined data to be related to the GPS reading, although it is also highly likely that geometric shapes are generated by the mapping modules in the course of drawing maps.

"applying said geometric shape to said GPS reading for defining an area having said geometric shape, said area having a selectable relationship to said GPS reading." - In Walters paragraph 32, the positioning modules [506] are identified as the modules which associate the GPS reading (longitude-latitude coordinates) with additional information such as any user-defined label. By associating a user-defined label that is a shape with a GPS reading, Walters would accomplish this result.

Regarding **claim 3**, which is dependent on claim 1 and claims "further including:

storing in memory a plurality of algorithms for generating said geometric shapes; and selecting one of said geometric shapes for said applying.” - In describing Walters’ mapping module shown in Fig. 5, the fact that it incorporates algorithms for generating geometric shapes is not explicitly stated. However, the mapping module draws maps and overlays custom application-defined data on existing maps as detailed in ¶35. These functions would require that the mapping module incorporate algorithms for generating geometric shapes.

Regarding **claim 5**, which is dependent on claim 4 wherein “said GPS reading is a center point for said circle.” – Walters’ positioning modules, as described in paragraph 32, permit the association of a location with a user defined entity such as a point-of-interest or a label. In placing a circle related to a GPS reading, the GPS reading would logically be on the circumference of the circle or at the center of the circle as the 2 choices available.

Regarding **claim 6**, which is dependent on claim 5 “wherein a diameter related value for said circle is input by a user.” – A circle is defined by an anchor point and a radius/diameter, It is logical to assume that the mapping module developer who provided the ability to ‘permit user-defined or custom-application defined data to be associated with coordinates’ (paragraph 35) provided the ability to define the diameter of a circle to be drawn.

Regarding **claim 11**, which is dependent on claim 1 "wherein said method is accomplished by an execution of an application development program, said application development program including code for creating predetermined areas." – Walters' provides APIs for use of an application development program. Fig. 5 is a block diagram of the modules within the application development program. The mapping modules as described in paragraph 35 all creation of predetermined areas, in particular streets o maps.

Regarding **claim 12**, which is dependent on claim 1 "wherein said method is accomplished by an execution of an application development program, said application development program including code for defining string and integer variables." – Walters' provides APIs for use of an application development program. Fig. 5 is a block diagram of the modules within the application development program. Although Walters does not detail defining string and integer variables, in the description of the mapping module in paragraph 35, it describes creating maps, which incorporate labels that are defined as string variables. Hence it is evident that Walters' application development system can define string and integer variables.

Regarding **claim 13**, which is dependent on claim 1 "wherein said method is accomplished by an execution of an application development program, said application development program including code for defining verbs useful in writing said user applications, said verbs including keywords used in conditional statements." – Walters

in describing the mapping modules (paragraph 35), describes permitting user defined data or applications to be associated with specific coordinates. Such actions would be accomplished by the user defined verbs of the claim.

Regarding **claim 22**, which is dependent on claim 1 “wherein said method is accomplished by an execution of an application development program, said application development program including code for accomplishing a predetermined processing action.” - Walters modules interfaced via an API provide code for accomplishing predetermined processing. For instance, the guidance modules provide guidance information such as the distance to the next decision point audibly, visually or both audibly and visually.

Regarding independent **claim 33**, “A medium programmed to provide operating signals when said medium is read by a compatible reading device, said operating signals being effective for enabling development of GPS-related user applications, said operating signals being further effective for: acquiring a GPS reading for a location at which a GPS receiver is located; determining a desired geometric shape to be related to said GPS reading; and applying said geometric shape to said GPS reading for defining an area having said geometric shape, said area having a selectable relationship to said GPS reading.” – presuming the claim intends to claim a computer readable media which when loaded provides a environment for enabling development of GPS-related user

applications, the subject matter of the claim is the same as that of claim 1 and is rejected under Walters for the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **4, 8-10, 17-21 & 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walters as applied to claim 1 above.

Regarding **claims 4 & 8-10**, which are dependent on claim 3 "wherein one of said plurality of geometric shapes is a circle (4), polygon (8), triangle (9) and square (10)". – The selection of a circle/polygon/triangle/square is a matter of choice, each of them being a common geometric shape. Each of these shapes was likely used in the mapping modules which displayed maps on a display. It would be well within the skills

of a developer who caused the mapping module to generate algorithms to draw maps, to generate algorithms to draw each of these geometric shapes separately.

Regarding **claim 17**, which is dependent on claim 13 wherein said application development program further includes code for defining prepositions which may be attached to said verbs. Walters' guidance modules provide navigation operations related to the tracked route of the device, paragraph 35. The timing of these operations can be modified based on user-configured or custom application configured conditions, paragraph 33. While Walters does not use the term "prepositions," the other actions of Walters' modules can be modified in the ways shown. The examiner interprets this capability as being equivalent to defining propositions.

Regarding **claims 18 - 21**, which are dependent on claim 17 "wherein said prepositions include code for 'narrowing a referenced condition to be for a specified amount of time (18)/ narrowing a condition to when a user is entering or leaving said defined area from a certain direction (19)/ narrowing a referenced condition to apply only to a user in movement (20)/ expanding a periphery of one of said areas by a selectable amount (21).'" - Walters does not call out the specifics of the listed modifications specified by the listed prepositions. However, in Walters' positioning modules, paragraph 32, which provide position and velocity of the device, the modules permit the association of positional information to additional information. While Walters is not specific on all the possibilities of the association, the examiner contends that it

would have been obvious for one of ordinary skill in the art of navigational programming to adapt the positional criteria for when the user is entering or leaving a defined area from a direction or to apply the association only when the user had a non-zero velocity. Further, Walters' guidance module, paragraph 33, allows modification of guidance based on time. It would have been obvious for one of ordinary skill in the art of navigational programming to apply the time constraints to actions other than guidance through interaction of the guidance and positioning modules. In Walters' mapping modules, paragraph 35, user defined data can be associated with areas within the map. Modifying the parameters of the areas would be well within the skills of a navigational programmer.

Regarding **claims 23 - 25**, which are dependent on claim 22 "wherein said predetermined processing action is a launching of a browser application (23)/ is a playing of an audio file (24) / is a printing of a message (25)." – Each of these actions is a common programming task well within the skill level of a navigational programmer.

Claims **2 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walters as applied to claim 1 above, and further in view of U.S. Patent No. 6,456,938 to Barnard (Barnard). Barnard shows a way that a golfer can map a golf course using GPS readings.

Regarding **claim 2**, which is dependent on claim 1, claim 2 claims "wherein said geometric shape is determined by:

acquiring a plurality of said GPS readings;
converting said GPS readings to location points; and" - Walters, in relation to Fig. 5, shows the reception of GPS readings [512] by the device [510] which, using the positioning modules, converts the GPS readings to location points. Walters does not however show "connecting said location points together to provide said geometric shape." Figure 3 in Barnard however illustrates an example of a device receiving GPS readings at set time intervals and connecting [30] the location points [35A] together to provide a geometric shape; in Barnard's case, a golf green. Developers of GPS related user applications are sophisticated programmers for whom connecting locations to create a geometric shape would be everyday. Therefore, it would be obvious to use Barnard's technique to define a unique shape related to a GPS reading to improve the development method in the same way.

Regarding **claim 7**, which is dependent on claim 5 "wherein a diameter related value for said circle is input by taking GPS readings for two locations, said diameter being defined by a line joining said two locations." - Walters, in relation to Fig. 5, shows the reception of GPS readings [512] by the device [510] which, using the positioning modules, converts the GPS readings to location points. Walters does not however show "said diameter being defined by a line joining said locations. Figures 11 and 12 of Bernard illustrate adding features to a map. One feature that can be added is a mound, which on page 23, line 40 is defined as a circle. While neither Bernard nor Walters

details how the circle is defined, it would be obvious to use two location points as the end points of a diameter of a circle to both locate and size the circle.

Claims **14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walters as applied to claim 1 above, and further in view of chapter 10, pages 395-401 of Computing Concepts with Java 2 Essentials (Computing Concepts). Computing Concepts discusses event management and how a mouse driver uses that facility.

Regarding **claims 14 – 16**, which are dependent on claim 13 “wherein said verbs include a keyword for triggering a throwing of an event when a user enters (13)/leaves (14)/is presently within (16) said defined area.” – “Triggering the throwing of an event” is a well known technique in event driven programming, supported by the JAVA programming language among others – See chapter 10 of Computing Concepts with Java 2 Essentials. On page 398, of Computing Concepts, 5 common mouse methods are listed – Mouse click on a component, mouse enters a component, mouse leaves a component, mouse button pressed on a component and mouse button released on a component. In paragraph 69, Walters asserts that the modules can be structured in an object-oriented language such as Java. One of ordinary skill in the art of navigation programming would therefore know how to use the verbs defined to trigger the throwing of an event in response to the verbs. Walters' positioning modules permit the association of a location with additional information. It is well within the skill of a navigation programmer to adapt the mouse methods available in JAVA to associate enters, leaves or is presently within a location using the positioning modules.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. 6,119,069 to McCauley for Deriving Field Boundaries from Points; U.S. 6,594,666 to Biswas for Location-Aware Application Development Framework; U.S. 6,904,361 to Tallman for a Municipal Utility Mapper; U.S. Pub. 2003/0101036 to Nagel for Navigation Map Creator; U.S. Pub. 2004/0207522 to McGee for Generating an Alarm Based on Location and Time; U.S. Pub. 2005/0197157 to Li for Application development System; U.S. Pub. 2005/0202862 to Shuman for Geographical Area Templates for Computer Games; and U.S. Pub. 2005/0264417 to Miller for Pushing Information to a User using GPS.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas G. Black whose telephone number is (571)272-6956. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LO

/Thomas G. Black/
Supervisory Patent Examiner, Art Unit 3661